# Environmental, Social and Governance Report

2020 performance review



American Airlines

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## **About American Airlines Group**

American's purpose is to care for people on life's journey. Shares of American Airlines Group Inc. trade on Nasdaq under the ticker symbol AAL, and the company's stock is included in the S&P 500. Learn more about what's happening at American by visiting news.aa.com, and connect with American on Twitter @AmericanAir and at Facebook.com/AmericanAirlines.



Strategy Climate Safety

Team Members



# Message From Our Chairman and CEO

The last 18 months have been unlike any other period in the history of our industry. We are incredibly proud of what the American Airlines team has accomplished in the face of extraordinary challenges. Throughout the COVID-19 pandemic, we have not lost sight of our purpose, which is to care for people on life's journey. We knew when all was said and done, what mattered most was how we treated our team and our customers.

This crisis, in many ways, has brought out the best in our team. They continue to embody the resilience and perseverance that has carried

us through difficult times in the past. Throughout the pandemic, our team members have worked tirelessly to ensure the safety and comfort of our customers. I am deeply grateful for their commitment and professionalism, and am honored to work alongside them every day.

The recent challenges have also underscored why our environmental, social and governance (ESG) efforts are so crucial. There's no question that responsibly managing our operations and positively contributing to social and environmental progress is the right thing to do. It's also clear that doing so is integral to our company's long-term success. And although this has been the most volatile period our industry has ever seen, American has continued to prioritize ESG and make meaningful progress in key areas.

Climate change poses serious risks for both our business and our planet, and its effects have become increasingly apparent. We have laid out an ambitious strategy to reach net-zero carbon emissions by 2050 and a clear plan to get there. We know the most impactful thing we can do today is use less fuel as we take our customers on their journeys. That's why we've made more than \$24 billion in capital investments to renew our fleet with hundreds of more fuel-efficient aircraft and why we are continually taking steps to improve operational efficiency.

It's more apparent than ever that many of the challenges we face are global in nature and that they will require collective action to solve. This thinking guided our decision to join the United Nations Global Compact, the world's largest corporate sustainability initiative, in 2020. As a member, American is committed to operating in ways that meet fundamental responsibilities in the areas of human rights, labor, environment and anti-corruption. We will report on our progress in implementing the Global Compact's principles in our next annual ESG report.

In the meantime, American took an important step this year to speed our path to net zero and bring additional accountability to our approach. We committed to developing a science-based target for reducing greenhouse gas emissions by 2035. American was the first airline in North America to seek validation of our efforts from the Science Based Targets initiative.

Our ambition doesn't stop there — and we know it can't. We want to be a force in advancing and helping commercialize critical low-carbon technologies that will put our industry, and the broader economy, on a sustainable path.

One way we are doing this is by joining Breakthrough Energy Catalyst as an anchor partner. Through this first-of-its-kind collaboration, leading companies, philanthropists and governments have come together to invest in pivotal emissions-reduction solutions — including sustainable aviation fuel — with the aim of accelerating and scaling the innovations needed to achieve a net-zero economy by 2050.

The quest for justice and equality is another call to action for our company, and we're continually reminded of how far we have yet to go. It's our job as a global airline to make the world a smaller, more inclusive place, and our strength lies in having a team that represents the diverse communities and customers we serve. We are working to create a workplace where everyone can feel valued and empowered, while driving and ensuring accountability for increased diversity at every level. We are also using our voice to back inclusion efforts outside our own workplace.

We have made progress over the past year on these and other important ESG issues, but we aren't done. And in fact, we'll never be done. We look forward to sharing additional updates with you in the months and years ahead.

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**Doug Parker** | Chairman and CEO
October 2021

Customers



# **Managing ESG**

Management of environmental, social and governance (ESG) issues is integral to how American Airlines operates and is embedded within our corporate strategy and objectives. This starts with being responsive to our stakeholders and transparent about our performance.

At American, ESG includes how we govern our business and hold ourselves accountable; invest in and support our team; advance diversity, equity and inclusion; serve our customers; minimize our environmental impacts and address climate change; and give back to our communities. These issues are not new for our company. However, in recent years we have begun to take a more systematic and integrated approach to ESG management, measurement and reporting.

## **About this report**

This 2020 ESG Report is designed to serve as a companion to our full 2019-2020 ESG Report, which was aligned with the Sustainability Accounting Standards Board (SASB) and Task Force on Climaterelated Financial Disclosures (TCFD) frameworks and released in October 2020. This update provides performance data for 2020 (unless otherwise noted, data is as of Dec. 31, 2020), and highlights key progress and developments since the release of the full report. We intend to release our next full report, which will again be aligned with SASB and TCFD, in mid-2022.

For more information on American's approach to ESG management and governance, see our full 2019-2020 ESG Report.





## Aligning with and advancing global sustainability efforts

In 2021, American joined the United Nations Global Compact, the world's largest corporate sustainability effort. As a signatory, we commit to align our strategies, policies and operations with universal principles on human and labor rights, the environment and anticorruption. We also pledge to contribute to advancing global efforts aimed at solving pressing environmental and social challenges.

American is identifying how we can help support the United Nations Sustainable Development Goals (SDGs), which lay out an agenda and targets for 2030. In our 2021 ESG Report, we will provide an update on our progress at implementing the Global Compact's Ten Principles within our operations, as well as how we are aligning our ESG efforts to advance the objectives of the SDGs.





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## **Our ESG Goals**

To drive progress, American has identified corporate goals for our material ESG issues. As a result of the unprecedented disruption caused by the COVID-19 pandemic, we understandably fell short of some of our goals. However, we accelerated progress on others.

Here's how we did against the goals we set for ourselves for 2020 and what we are aiming to achieve in 2021 and beyond:

## **Safety Management**

2020 & 2021 Goals	2020 Performance		
Maintain the highest passenger safety standards with no customer injuries.	Experienced zero serious customer injuries.		
Reduce on-the-job team member injuries.	Reduced injury rate by 41% in mainline operations and 46% in regional operations.		
Reduce aircraft ground damage.	Saw aircraft damage rates increase by 34% in mainline operations and 13% in regional operations.		

## **Climate Change and Fuel Efficiency**

## 2020 Goals

Attain a 1.5% improvement in average fuel efficiency from 2014 through 2020, or 9% cumulatively over the six years.

Source 2.5 million gigajoules (GJs) of cost-competitive renewable energy by 2025.

## **2020 Performance**

million GIs since 2019.

Fuel efficiency decreased by 27% (per revenue ton mile) due to dramatically reduced passenger loads as a result of COVID-19. Achieved a 5.3% cumulative fuel efficiency improvement from 2014–2019.

Sourced 0.24 million GJs of renewable energy, including our 1 millionth gallon of sustainable aviation fuel from Neste. Cumulatively, sourced a total of 0.43

Reduced Scope 1 emissions by 48% as a result of drastically reduced operations due to COVID-19.

## 2021+ Goals

Achieve absolute reduction of 50 million gallons of jet fuel from fuel-efficiency initiatives by 2025.

Source 2.5 million gigajoules (GJs) of cost-competitive renewable energy by 2025.

Replace 10% of our jet fuel with sustainable aviation fuel by 2030.

Receive validation from the Science Based Targets initiative (SBTi) for our 2035 greenhouse gas emissions reduction goal (submitted to SBTi in 2021).

Achieve net-zero carbon emissions by 2050.

## **Team Member and Labor Relations**

## 2020 & 2021 Goals

Support our team members with resources for their emotional, physical and financial well-being.

## 2020 Performance

Management and union leadership worked collaboratively in leading the industry to obtain government payroll support for all airline workers during the worst months of the COVID-19 crisis.

## **Diversity, Equity and Inclusion**

### 2020 Goals

Listen more intentionally to team member concerns and address those concerns in our learning, development, advancement and recruitment programs and processes.

Provide additional learning opportunities beyond implicit bias to deepen awareness of diversity and inclusion issues.

Launch an external Community Council composed of executives and a crosssection of Black community leaders to provide feedback on company initiatives.

## 2020 Performance

Held more than 80 listening sessions and town halls with our team members.

Launched a new Inclusive Workplace training in January 2021, and more than 90,000 team members had completed it by August.

Announced external Community Council in June 2020, followed by first meeting that November.

## 2021+ Goals

Increase Black representation at the level of director and above by 50% in 2021.

Retain at least 90% of Black leaders at and above the level of director.

Increase Black representation among senior managers by 20%.

## **Customer Satisfaction and Operational Performance**

## 2020 & 2021 Goals

Improve Likelihood to Recommend (LTR) scores.

Achieve improved systemwide operational metrics, including on-time performance percentage, completion factor percentage and mishandled baggage rate.

## **2020 Performance**

Improved LTR by 0.8 points.

Improved on-time performance and mishandled baggage rate.

Saw decline in completion factor from 2019 due to cancellations related to the pandemic.



# Advancing Our Climate Change Strategy

Climate change is no longer a distant threat; its effects are increasingly being felt around the world today. Urgent and meaningful action is needed. As one of the world's largest airlines, American intends to be a leader in helping drive the operational, policy and technological changes needed to advance the transition to a low- and no-carbon aviation future.

In 2020, we announced our goal to achieve net-zero greenhouse gas (GHG) emissions by 2050. As we said at the time: Ambition is important, but we know what matters most is having a clear path for getting to zero. In 2021, we took a key step in that direction by committing to set an intermediate, science-based GHG reduction target.

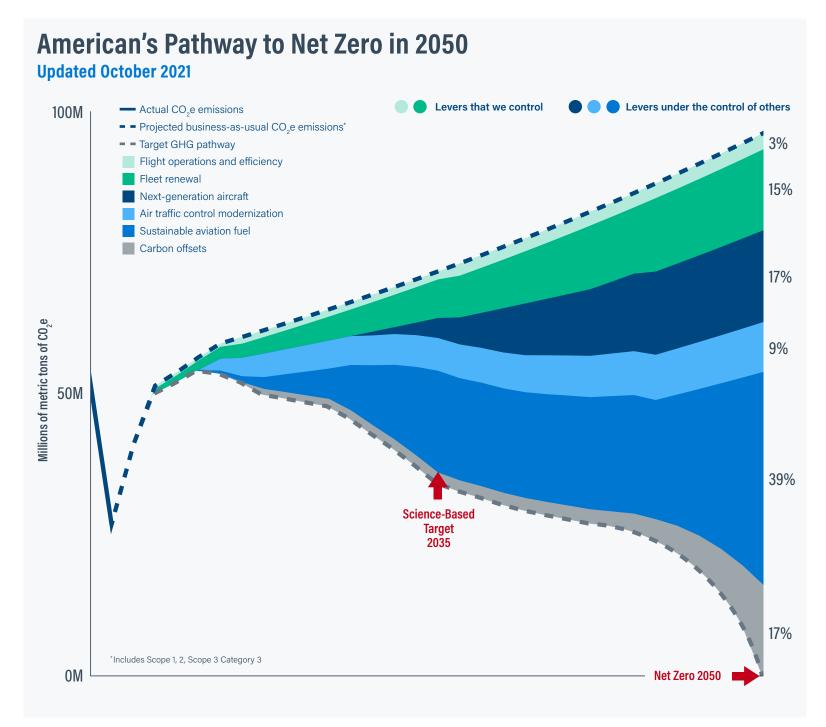
## Bringing rigor and accountability to our approach

In July 2021, American became the first airline in North America to begin the validation process with the <u>Science Based Targets initiative (SBTi)</u>, a collaboration between CDP, the United Nations Global Compact, World Resources Institute and the World Wide Fund for Nature. In doing so, American committed to develop a GHG emissions reduction target that will be reviewed by SBTi to confirm its consistency with the latest climate science.

The move sharpens American's strategy for reaching net-zero GHG emissions by 2050 and brings additional accountability to our approach. We will track and report progress on an annual basis in this report. American also became a signatory to the <u>Business Ambition for 1.5°C campaign</u> and joined <u>Race to Zero</u>. The latter campaign, backed by the United Nations, aims to rally support for a zero-carbon economy from businesses, cities, investors and other nonstate actors.

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## Honing our pathway to net zero

Underpinning our strategy to achieve net-zero GHG emissions is the in-depth analysis we conducted in 2019–2020 to understand the climate-related risks and opportunities facing our company. We studied their potential impacts on our business, operations and the broader environment in which we work. American is using these insights to target our efforts where we can have the most meaningful near-term impact in reducing our carbon footprint and mitigating our most significant climate-related risks.

This analysis also formed a key basis for our inaugural report aligned with the recommendations of the <u>Task Force on Climate-related</u> <u>Financial Disclosures (TCFD)</u>, which we released in 2020. For a detailed discussion of the climate-risk assessment process we undertook and our findings, see our full <u>2019–2020 ESG Report</u>. We have publicly declared American's support for the TCFD, and we will continue to work to implement its recommendations and use it as a framework for our reporting. We plan to release our next TCFD-aligned report in 2022.

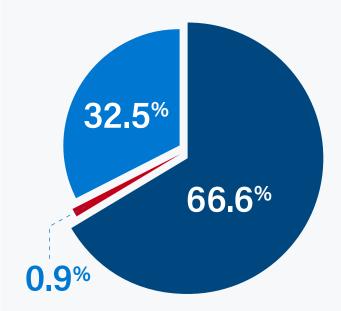
Our climate strategy is focused on driving progress across six key levers — some of which we have the ability to influence directly and some of which will require action and collaboration across sectors and the aviation industry. Government policy decisions will also play a critical role. This section includes brief updates on developments within each area and, where appropriate, the latest performance data.

The accompanying infographic, which first appeared in last year's report, reflects each lever's current  $\mathrm{CO_2}$  emissions and our expectations today about the role it will play in getting to net zero in 2050. We have added the intermediate 2035 target we have set — and updated the illustrative pathway for reaching both our 2035 and 2050 targets — to align our reporting with the commitment we have undertaken with SBTi. To achieve our new target, we made more aggressive assumptions regarding the availability of sustainable aviation fuel and the approval and adoption of hydrogen and electric propulsion aircraft. American will continually update our anticipated pathway to 2050 as technology advances and other factors impact our operating environment.

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## **Our GHG Emissions in 2020**

Total emissions (Scopes 1, 2 and 3): 29.76 million metric tons of carbon dioxide equivalents (CO<sub>2</sub>e)



SCOPE 1

**99.0%** from jet fuel (mainline and regional operations)

SCOPE 2

**100%** from purchased electricity (location-based)

SCOPE 3

**70.3%** from jet fuel (contracted regional carriers and upstream fuel emissions)

**19.7%** from purchased goods and services

89%

of our total carbon footprint is from jet fuel.

## Our 2020 GHG emissions and fuel efficiency

American's absolute GHG emissions declined significantly in 2020, driven by the dramatic reduction in travel due to the COVID-19 pandemic. Scope 1 (direct) GHG emissions, which account for over two-thirds of our direct and indirect GHG footprint, fell by roughly half in 2020. These emissions stem almost entirely from the burning of jet fuel by our aircraft, plus a small portion from the fuel used by our ground service equipment.

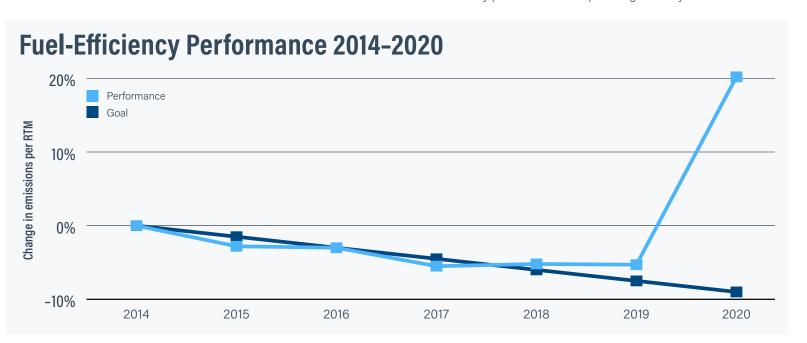
Our Scope 2 emissions, which make up the smallest portion of our carbon footprint (0.9%), fell by 13.3%. They include emissions associated with the purchase of electricity to run our operations.

Estimated Scope 3 (upstream and downstream) emissions, which account for about one-third of our overall emissions, fell by nearly 40%. Upstream emissions associated with the production of jet fuel is the largest element, followed by emissions from our third-party regional carriers and those associated with purchased goods and services and team member travel. In 2020, we strengthened our methodology for calculating Scope 3 emissions, using EPA guidance to more accurately

estimate the emissions associated with particular types of products and services. In 2022, we plan to refine it still further by working with our major suppliers to collect supplier-specific emissions data.

While the reduction in demand for air travel due to COVID-19 decreased our absolute emissions, lower passenger volumes on the flights we did operate adversely affected our fuel efficiency. We track efficiency using revenue ton miles (RTM), which measures the fuel (and associated GHG emissions) needed to fly one ton of payload — the combined weight of passengers, their bags and cargo — one mile. Operating at close to the maximum passenger capacity of an aircraft increases fuel efficiency; conversely, operating below capacity — as we did during the pandemic — decreases fuel efficiency.

We have been striving to improve American's fuel efficiency by an average of 1.5% annually — or 9% cumulatively — from 2014 (the first full year after we merged with US Airways) to 2020. The past year was clearly an outlier, with our fuel efficiency declining by 27%. As passenger loads return to pre-pandemic levels, we expect our fuel-efficiency performance to improve significantly.



American's ongoing fleet renewal initiative, the most extensive in our industry's history, is a key component of our climate change strategy. Each new generation of aircraft targets 15%-to-20% improvements in fuel efficiency, which yield meaningful reductions in GHG emissions.

Since 2013, we have invested more than \$24 billion in modernizing our fleet by taking delivery of 600 new aircraft. We retired a similar number over the same period, a process that we accelerated in 2020 due to COVID-19 and the consequent decrease in demand.

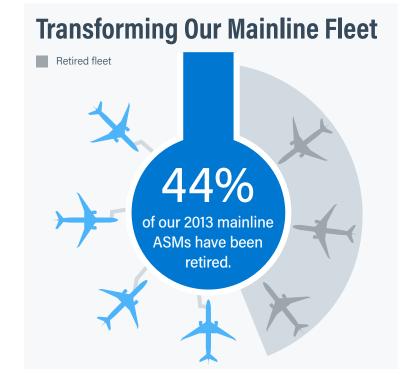
Largely as a result of flying these more efficient aircraft, we have improved our fuel burn per available seat mile (ASM) by 8.5% compared with 2013. (ASM measures an airline's passenger carrying capacity, and it is calculated by multiplying the number of seats available on an aircraft by the number of miles it will fly.) That adds up to 1.5 billion gallons of fuel saved and 14 million metric tons of

CO<sub>2</sub> emissions avoided. That is equivalent to the CO<sub>2</sub> emissions generated by 3 million U.S. cars in one year. It would take 17 million acres of U.S. forests a year to absorb the same level of emissions.<sup>2</sup>

## Building a younger, more fuel-efficient mainline fleet

As of September 2021, American has the youngest mainline fleet among U.S. network carriers, at an average age of 11.6 years. Over the last two years, we have retired five fleets (A330, B767, B757, MD-80 and E-190) that accounted for 43.9% of our capacity in 2013. New fleet type additions such as the Boeing 787, Boeing 737 MAX and the Airbus 321neo, which incorporate the latest engine and airframe technologies, made up over 10% of our total ASMs in 2020 and are helping contribute to the improved efficiency of our fleet. We will continue to induct these next-generation aircraft in the years to come. Based on gallons of fuel consumed per ASM, our mainline fleet fuel efficiency improved by 11.5% from 2013 through 2020.

<sup>&</sup>lt;sup>2</sup> Source: U.S. Environmental Protection Agency Greenhouse Gas Equivalencies Calculator.



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**Cumulative Improvements Since 2013, Percentage Change** 



**1.5**<sub>B</sub>

gallons of fuel saved

 $14_{M}$ 

metric tons of CO<sub>2</sub> emissions avoided

<sup>&</sup>lt;sup>1</sup> Through June 30, 2021.

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## Changing the mix of our regional aircraft

Through our regional carriers, we serve many smaller communities and low-density markets that don't have the passenger traffic to support larger jets. However, smaller aircraft and shorter flights which devote a larger percentage of overall flight time to takeoff and landing — come at a fuel-efficiency cost and make it more challenging to reach our fuel-efficiency goals.

In recent years we have made significant investments in updating our regional aircraft fleet. This includes retiring a number of small regional jets and replacing them with large regional jets (LRJs) — such as the Embraer E175 and the Bombardier CRJ900 — which are on average more fuel efficient. In 2013, LRJs accounted for just 14% of regional ASMs. Through our re-fleeting strategy, LRJs now account for 66% of ASMs. These efforts have resulted in a 16.3% improvement in the fuel efficiency of our regional fleet since 2013.

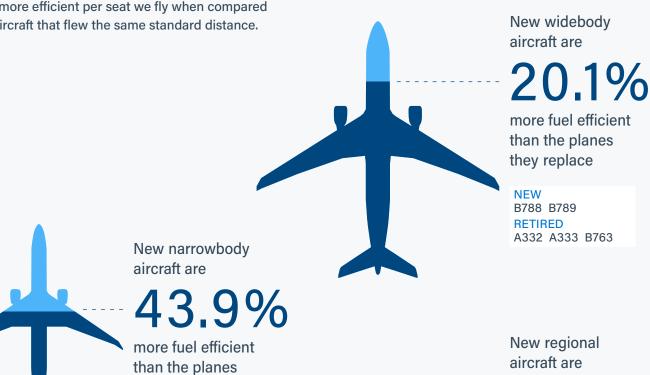
We continue to evaluate emerging technologies such as electricand hydrogen-powered aircraft, which will allow us to significantly improve our fuel efficiency while continuing to serve these important communities.

## **Committing to further fleet enhancements**

Looking ahead, we expect to expand our current fleet of Boeing 737 MAX 8 aircraft from 41 to 100 by 2026. Over the same period, we will take delivery of more than 80 aircraft in the A321 family. That includes initial shipments in 2023 from our order of 50 A321XLRs. With its 30% lower fuel burn per seat than previous-generation competitors, this long-range, single-aisle aircraft will create new opportunities for us in both domestic and international markets.

## **Fuel Efficiency by Fleet Type**

The new aircraft American has added to our fleet are up to 44% more efficient per seat we fly when compared to retired aircraft that flew the same standard distance.



they replace

A321NEO B738MAX

B757 MD80 E190

**NEW** 

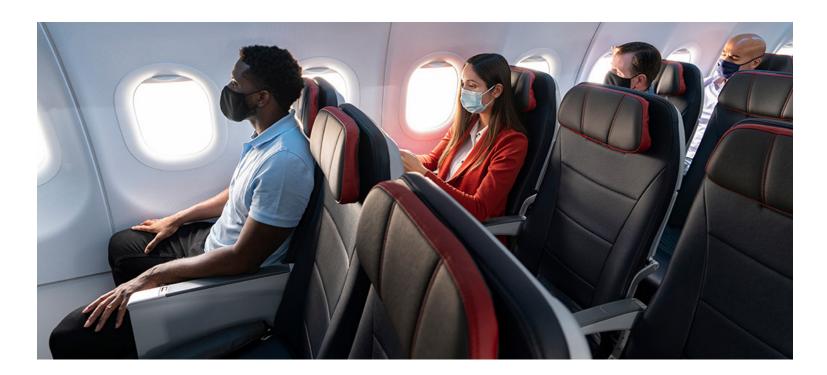
**RETIRED** 

New regional aircraft are

17.5%

more fuel efficient than the planes they replace

NEW E175 CRJ9 **RETIRED** DASH-8 CRJ2 E140



## **Sustainable Aviation Fuel**

Significantly increasing the use of sustainable aviation fuel (SAF) will play a critical role in our ability to reach net-zero GHG emissions by 2050. The majority of the SAF in production today, which is made from waste products that include municipal solid waste, used cooking oil, plant oils, waste gases and agricultural residues, can reduce life cycle GHG emissions by up to 80% compared with conventional, petroleum-based jet fuel. And there are companies working to develop other pathways to make SAF, often using low-value waste feedstock with the potential for even greater life cycle emissions reductions.

We began our SAF transition in early 2020 by agreeing to purchase 9 million gallons of SAF from renewable-products leader Neste.

Although the COVID-19 pandemic reduced American's overall fuel consumption by about half compared with 2019, we still reached a

milestone by taking delivery of our 1 millionth gallon of SAF in May 2021 at San Francisco International Airport. We expect to fulfill our Neste commitment by the middle of 2023.

In addition to our Neste deal, in July 2021 we announced plans to purchase up to 10 million gallons of SAF produced by Prometheus Fuels. Prometheus has developed a novel process to make net-zero GHG transportation fuels, including SAF. The only inputs are air and renewable electricity, and the only outputs are fuel and oxygen. Prometheus plans to begin production in 2022.

Through our membership in the <u>Commercial Aviation Alternative</u> <u>Fuels Initiative</u>, we are also part of a coalition of airlines, aircraft and engine manufacturers, energy producers, researchers, international participants and U.S. government agencies focused on enhancing sustainability through the use of alternative jet fuels.

## **Ensuring sustainable SAF production**

As American engages with our SAF suppliers, we are encouraging them to follow sustainability best practices related to its sourcing and production. Our goal is to move toward having all our future SAF purchases be certified by a trusted third party to ensure the use of feedstocks that do not compete with food crops, displace forests or have a negative impact on biodiversity.

To reflect our focus on certification, we have joined the <u>International Sustainability and Carbon Certification System</u> and support its rigorous environmental and social sustainability criteria for the use of feedstocks.

## Supporting policies to build the SAF market

While the SAF industry continues to invest in and increase production capacity, the high cost of SAF relative to conventional jet fuel is a major barrier to its adoption. That is why American supports policies that will help the SAF market grow to commercial scale and that make SAF an economically viable fuel alternative.

For example, American welcomed the introduction of the Sustainable Skies Act in the U.S. Congress in May 2021. Under the proposal, SAF that achieves a significant reduction in life cycle GHG emissions compared with conventional jet fuel would be eligible to receive a tax credit. It would rise incrementally for fuels that achieve an even greater reduction in emissions. We believe the fundamental structure of this proposal is well-designed to boost the scale of SAF production in the United States.

As Congress considers legislation on both infrastructure and tax policy, we continue to voice our support for a SAF-specific tax credit or a similar policy designed to boost SAF production and make it more cost-competitive.

# Catalyzing Investment to Address Climate Change

American's strategic partnership with <u>Breakthrough Energy</u>
<u>Catalyst (Catalyst)</u> — announced in September 2021 — supports our net-zero aspirations and is aimed at accelerating the innovations necessary for achieving a net-zero economy by 2050.

A groundbreaking program within the larger Breakthrough Energy network founded by Bill Gates in 2015, Catalyst is working to accelerate the development and commercialization of critical climate technologies that will make it possible to reach net-zero emissions. The effort will initially focus on SAF, green hydrogen, long-duration energy storage and direct air capture.

Through the partnership, businesses, governments, philanthropies and individuals have come together to invest in these promising climate solutions. This will help reduce the costs of clean technologies — lowering their "Green Premiums" and enabling them to compete with the higher-carbon technologies they would replace — and accelerate the adoption of the low- and no-carbon solutions we need.

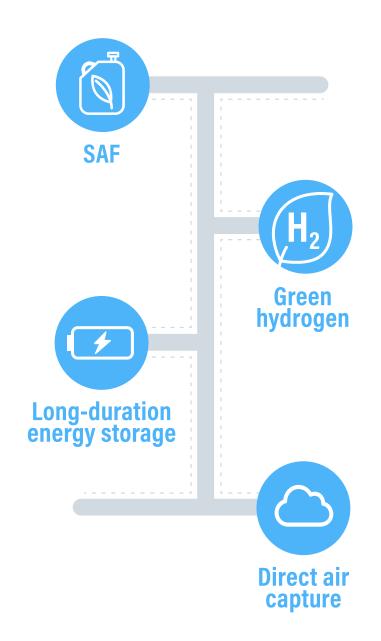
As an anchor partner, American is committing \$100 million. We have an ambitious vision of a low-carbon future for our airline and a plan to match, but we recognize that our own efforts can only get us so far. By working in partnership with Catalyst, we're helping accelerate and scale our industry's nascent solutions.

Alongside American, Catalyst's inaugural roster of private sector anchor partners includes ArcelorMittal, Bank of America, The BlackRock Foundation, Boston Consulting Group, General Motors and Microsoft. Each is an industry leader that has taken meaningful steps to address climate change. Catalyst also recognizes the crucial role of governments, and in June 2021 announced a \$1 billion partnership with the European Commission and European Investment Bank, followed in August by a \$1.5 billion agreement with the U.S. Department of Energy.

American and these other partners will come together with Breakthrough Energy to make significant investments in early commercial demonstration projects, offer perspectives on continued private sector engagement, provide insights on investment and offtake strategies and help encourage more companies to join Catalyst. Additional anchor partners may be announced around COP26, the United Nations Climate Change Conference in November 2021.



Catalyst is also working to develop the "Emerging Climate Technology Framework," which offers a sophisticated way to quantify the climate impact of clean technology investments. Companies will be able to use this framework to measure and project how their investments will lower Green Premiums and ultimately eliminate current and future emissions, offering a more rigorous way to evaluate and reward effective private sector climate action.



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Safety

## **Next-Generation Aircraft**

Reducing emissions from the current generation of aircraft by improving efficiency and increasing the use of SAF is an essential step on our journey to net-zero GHG emissions. However, getting there will also depend on technological advancements that enable aircraft to be powered by low- and no-carbon fuel sources such as green hydrogen and electricity. American continues to engage with our aircraft suppliers and other key players in the aviation sector to support the advancement of these next-generation aircraft.

As we aim to contribute to the development of emerging technologies that reduce carbon emissions, American recently invested in Vertical Aerospace. Founded in 2016, this U.K.-headquartered engineering and aeronautical business is developing an emissions-free electric vertical takeoff and landing (eVTOL) aircraft, the VA-X4, that can carry four passengers and a pilot. Designed for transporting customers quickly both between and within cities, the VA-X4 will fly at speeds up to 200 mph over a range of more than 100 miles. This is an exciting first step in the electrification of flight. With the rapid rate of change in battery and



Vertical plans to conduct its first test flight of the VA-X4 in late 2021, with certification of the aircraft expected as early as 2024. As part of our investment, American has agreed to preorder (subject to certain future milestones and other terms) up to 250 aircraft. That represents a potential preorder commitment of \$1 billion.

## **Air Traffic Control Improvement**

The United States has the safest air traffic control (ATC) system in the world, but it continues to rely too heavily on outdated technology and processes that are inefficient or poorly equipped to accommodate growing air traffic. Modernizing the country's network of aviation infrastructure, technology and services will increase operational efficiency and reduce jet fuel use. In turn, that will avoid millions of metric tons of CO<sub>2</sub> emissions annually and help reduce aviation's carbon footprint.

American is working collaboratively with the Federal Aviation Administration (FAA) and advocating for resources to accelerate the deployment of three planned FAA measures that are both cost-effective and will yield immediate and long-term environmental benefits. These include the following:

• Unlocking Automatic Dependent Surveillance-Broadcast In (ADS-B In) capability on aircraft that are equipped to take advantage of this technology. "ADS-B In" leverages satellite-enabled navigation instead of outdated radar systems to deliver weather and traffic position information directly to the flight deck. That allows pilots to optimize flight paths, which reduces emissions and enhances safety. For less than a \$50 million increase in the currently projected budget, the FAA could accelerate "ADS-B In" deployment by several years.

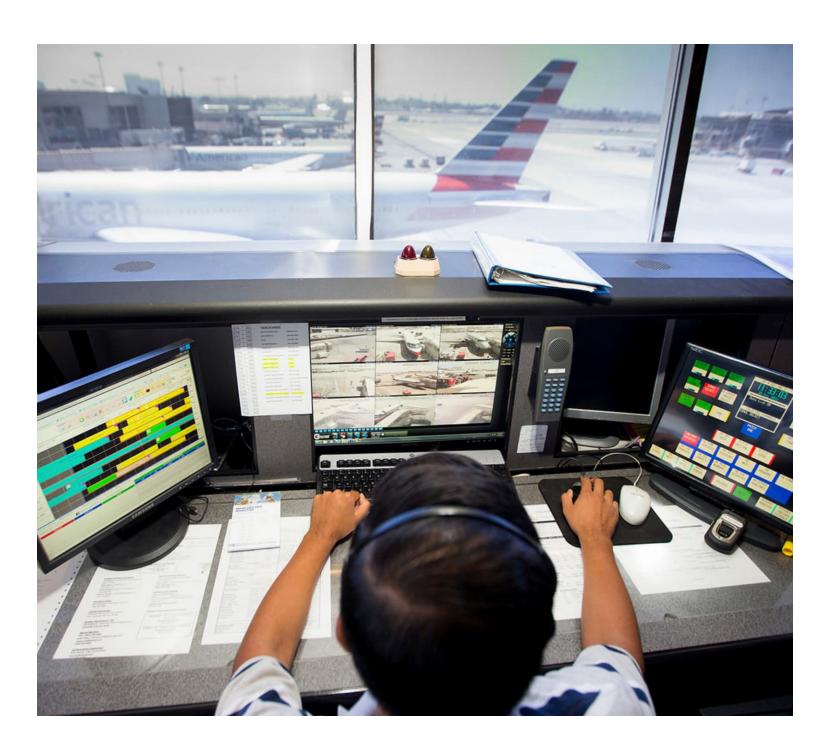


- Accelerating implementation of Terminal Flight Data Manager (TFDM) infrastructure. American, NASA and the FAA recently partnered on a trial program in Charlotte, North Carolina, that validated TFDM's significant benefits. They include avoidance of wasteful ground and airborne delays and optimizing efficient transition into overhead enroute airspace. Funding TFDM's rapid expansion to more airports will not only reduce CO<sub>2</sub> emissions; it will also help deliver a more reliable, on-time experience for passengers.
- Speeding up the establishment and use of Trajectory Options Sets (TOS). This initiative for managing flights through a constrained area will reduce taxi and flight times. It also gives airlines and ATC an opportunity to better utilize existing airspace capacity to provide customers with a more reliable schedule.

# Flight Operations and Fuel Efficiency

American continually looks for opportunities to make operational adjustments that improve fuel efficiency and reduce GHG emissions. We also invest in new technologies that drive further efficiency gains. For example, in the beginning of 2020, we began deploying specialized software that uses real-time weather conditions to provide our flight crews with better data about optimal flight altitudes and speeds. In 2020 alone, this technology allowed us to reduce fuel use by more than 1.1 million gallons, while still maintaining rigorous safety protocols. And over the full 21 months since we began implementation, American has saved more than 3.9 million gallons of fuel. That translates into 36,000 metric tons of CO<sub>2</sub> emissions avoided.

We have taken steps to reduce weight on our aircraft — from installing lighter seats to using lighter paint. Our decision to remove in-seat entertainment centers further improved fuel efficiency. Instead, customers can download the free American Airlines app on their



# 12.4<sub>M</sub>

gallons of fuel saved annually through our weight-reduction efforts — equivalent to 117,800 metric tons of CO<sub>2</sub> emissions avoided

personal devices and connect to our complimentary entertainment library without Wi-Fi fees. Collectively, these weight-reduction efforts save 12.4 million gallons of fuel annually, equivalent to 117,800 metric tons of CO<sub>2</sub> emissions avoided.

In addition, American continues to identify ways to use less jet fuel — and reduce our GHG emissions — both pre- and post-flight. For example, we increased our use of single-engine taxi operation. By relying on just one aircraft engine to taxi to the gate after landing when possible, we lowered emissions by 18,700 metric tons of  ${\rm CO_2}$  in 2020.

Using 2019 aircraft as a baseline, American has set a target to achieve a 50-million-gallon absolute reduction in jet fuel use by 2025. That is, aircraft in our fleet as of January 2019 that continue to fly through 2025 will use 50 million gallons less fuel as a result of fuel-efficiency initiatives separate from the efficiency improvements gained through our fleet renewal efforts.



For detailed direct and indirect GHG and other emissions data, see <u>page 26</u>.

## **Market-Based Solutions**

Increasing our fuel efficiency and reducing emissions remain the core focus of American's climate strategy, but market-based mechanisms such as carbon offsets will continue to play a role for the foreseeable future.

The <u>Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)</u> regulates emissions from international aviation. We have endorsed its goal of achieving carbon-neutral growth in emissions after 2020. Airlines and other aircraft operators will offset any growth in CO<sub>2</sub> emissions above the revised 2019 baseline established in the wake of the COVID-19 pandemic. Due to reductions in travel and emissions as a result of the pandemic, airlines will not be required to offset any emissions under CORSIA until international flight volumes exceed pre-pandemic levels.

# Giving our customers the opportunity to offset their flights

July 2021 marked the one-year anniversary of our partnership with Cool Effect, a leading nonprofit provider of carbon offsets. Through the program, American Airlines customers can easily calculate the emissions of their flight and purchase high-quality offsets at the following webpage: www.cooleffect.org/american-airlines. Nearly 12,000 customers have chosen to offset the emissions from their flights through Cool Effect since our partnership began.

Cool Effect uses more than 90% of each offset dollar to fund a portfolio of high-quality, verified carbon reduction projects that protect and conserve our planet's resources. For example, in Indonesia that money is helping reduce more than 7.5 million metric tons of  ${\rm CO_2}$  each year by protecting and restoring 157,000 hectares of peat swamp. In Honduras, it is funding improved cookstoves that use just half the amount of wood of a traditional stove — halving  ${\rm CO_2}$  emissions in the process and reducing dangerous air pollutants.



The Katingan Mentaya Project in Indonesia protects vital peatland habitats and is just one of several initiatives funded by Cool Effect carbon offsets.



# **Operating Safely**

At American Airlines, our safety efforts encompass all we do to ensure that our customers fly with confidence and our team members are healthy and safe. We are dedicated to protecting our customers and our workforce at every step — in the air and on the ground.

Amid the challenges posed by the COVID-19 pandemic, we continued to deliver strong health and safety performance in 2020. For example, mainline injury rates declined from 9.6 to 5.6, while regional injury rates fell from 7.1 to 3.8. In the face of the pandemic, we also took specific steps to protect both our customers (see <u>page 22</u>) and team members (see <u>page 20</u>).

American's safety philosophy is embedded in our day-to-day work through robust policies, continual education, engagement and investments in technology. All are designed to prevent accidents and increase our team member safety experience.

## Focusing on safety management

Our efforts are guided by American's Safety Management System (SMS), an organization-wide approach that emphasizes safety management as a fundamental business process to be considered in the same manner as other aspects of business management.

Our SMS involves a full commitment from the most senior levels of our company through to each team member to integrate safety into all parts of how we do our jobs. It ensures robust and repeatable processes driven by data to reduce risks and continuously improve and enhance safety for our customers and team members. We collaborate closely with the Federal Aviation Administration to maintain operational safety at the highest level possible and actively share best practices with our industry peers, governments and aerospace manufacturers. For more detailed information on our SMS, see our full 2019–2020 ESG Report.

Our performance in 2020 demonstrates that we must do more to improve safety throughout our operations. In December 2020, a member of our ground support crew at O'Hare International Airport in Chicago was killed during an accident involving a vehicle lift operation. A devoted husband and father, he was also a hard worker who would always go above and beyond for his team.

In response and to prevent future such accidents, our wholly owned regional carrier Envoy Air hired an experienced third-party firm to audit Envoy's policies and procedures at all of its ground support maintenance bases. Following the audit, Envoy conducted a job hazard analysis, retrained its employees on a revised Safety Business Plan and created new work rules to govern vehicle lift operations.

# Identifying new ways to enhance our team member safety efforts

We remain focused on building safety into everything we do. Among the new safety programs we introduced in 2020, StaySafe is a safety communications campaign implemented across our airport and technical operations organizations. Its materials focus on lessons learned and ways to prevent team member injuries and equipment damage. Any bulletins or alerts are available across multiple platforms in order to reach all team members.

Through our new Safety Engagement Tool, we are bringing company leadership to the frontlines to engage in conversations with team members. Managers can communicate safety expectations, assess risks in the operation and reinforce safe behaviors.

Team member reporting programs remain strong and include our new Ground Safety Action Program (GSAP) for Fleet Service and Cargo teams. GSAP provides an outlet for team members to confidentially report escapes and errors as well as near misses. It fosters a partnership that allows frontline team members and union representatives to play a more active role in addressing safety issues and improving our safety culture.

For detailed safety performance data, see page 29.

## **Our Safety Management System**

The safety of our customers and team members is guided by our Safety Management System (SMS), an organization-wide approach to managing risk and assuring the safety of our operations and team members. Our SMS has the following four components:



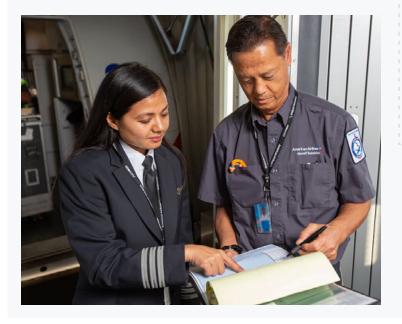
### **SAFETY POLICY**

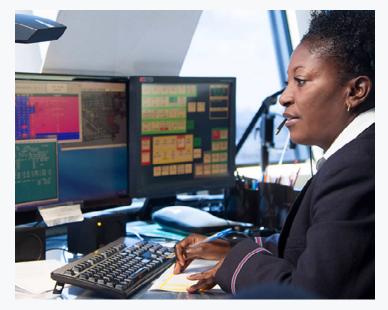
Establishes senior management's commitment to continually improve safety; defines the methods, processes and organizational structure needed to meet goals



## **SAFETY ASSURANCE**

Evaluates the continued effectiveness of implemented risk control strategies; supports the identification of new hazards





3

## **SAFETY RISK MANAGEMENT**

Determines the need for, and adequacy of, new revised risk controls, based on the assessment of acceptable risk



## **SAFETY PROMOTION**

Includes training, communication and other actions to create a positive safety culture within all levels of the workforce

# **Supporting Our Team Members**

We have invested significant resources in supporting American Airlines team members, from our focus on diversity, equity and inclusion (DEI) to the work we have done prioritizing talent development, benefits, labor relations and human rights. Creating an environment where team members feel supported ultimately benefits our customers as well. Read about our many team member initiatives in our 2019-2020 ESG Report. For this update, we focus primarily on our latest DEI efforts.

## **Diversity, Equity and Inclusion**

Cultivating an environment that celebrates DEI is a priority for American. We are working to create a workplace where team members feel valued and empowered to be their authentic selves and where we are always learning from one another.

Over the past year, we have become more intentional in our efforts to create and sustain meaningful change. In 2020, we held more than 80 listening sessions and town halls, acted on team member feedback and deepened our focus on the journey ahead. This work is critical to our goal to drive DEI excellence and make American's culture a

competitive advantage. Importantly, we have set goals for our leaders and are measuring progress regularly because we know that what gets measured is more likely to get done.

## **Emphasizing training on inclusion and bias**

Learning is a critical part of our lifelong journey, and we're committed to providing our teams with the tools they need to take care of all our customers and each other. In 2018, we launched implicit bias training, which more than 100,000 team members completed. The Inclusive Workplace training we launched in January 2021 underscores the value of DEI at American, and more than 93,000 team members had taken the course through July.

## **Driving diversity in recruitment and retention**

American's workforce must reflect our customer base and society as a whole. We also recognize that promoting diversity is critical at all levels of our company and that we have a responsibility to identify and address opportunity gaps wherever they exist. We will annually review representation data and identify multiyear, companywide diversity goals for any underrepresented positions.

For example, at the beginning of 2021 we set a year-end goal — which we are on track to achieve — of increasing Black representation at the directors and above level by 50%. We also expect to retain at least 90% of these leaders. The Executive Sponsorship Program we launched in September 2020 is just one of the ongoing initiatives that will help us succeed. Through it, we paired 15 Black managing directors and directors with a senior executive leader for a yearlong sponsorship program. It has proven so successful that we will launch a second round in January 2022.

American continues to implement solutions to drive diversity in our hiring and advancement practices. For example, we began using HiredScore in September 2021 to ensure accountability and mitigate potential hiring bias.

In August 2021, we partnered with McKinsey & Company to offer select team members access to its Leadership Academies. This program proved highly successful when we initially introduced it for Black managers and above in 2020.

In 2020, American also formed a council made up of seven well-established Black community leaders with experience representing different industries as an integral part of our deepening commitment to diversity, equity and inclusion. As American works to strengthen our relationship with Black customers, we need to listen carefully and gain new perspectives on our journey to make American a better place for everyone. The members of the council serve as strategic advisers who provide us with objective and candid insight on company initiatives, particularly those focused on improving the customer travel

experience. Our senior leaders, as well as our Customer, Talent and DEI teams, regularly engage council members. Their feedback has helped inform our work around customer experience, representation, pipeline development and supplier diversity.

Finally, more than 26,000 team members belong to an Employee Business Resource Group (EBRG). American's Talent and DEI teams proactively engage EBRGs to promote open positions internally with intentional focus on diverse communities. Our EBRGs also offer targeted development opportunities to team members.

# Achieving certification for our commitment to pay equity

Pay equity is a cornerstone of American's DEI work, and we were proud to become one of the initial companies to be certified as a <u>Fair Pay Workplace</u> in September 2021. Seattle-based Fair Pay Workplace is a nonprofit organization that is working to dismantle pay disparities based on gender, race and ethnicity to create sustained



fair pay in the workplace. Our certification means that American has undergone a rigorous evaluation of our data and practices via a transparent set of rules and standards. We have committed to following a tailored action plan building upon fair pay practices to ensure there are no pay gaps for team members performing similar roles.

The Fair Pay certification applies specifically to our management and support staff team. Approximately 85% of our team members are represented by unions and have built-in pay equity. Among our certification requirements, American will undergo regular check-ins for progress. We have also pledged not to ask job candidates about their prior compensation or expectations for starting pay, which Fair Pay has identified as one of the largest sources of pay gaps.

We recognize that DEI remains a work in progress and are energized by the road ahead. We will continue striving to create an inclusive culture where all team members and customers feel valued and welcomed.

# Advocating for just and equitable laws

Equity and inclusion are core values that are critical to the success of our company. Laws that create unequal treatment are not only bad policy, they are also bad for business. Over the course of hundreds of listening sessions and town halls, we've heard concerns on a range of issues impacting team members and our customers.

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In response, American supported the successful effort to enact an anti-hate crimes law in Georgia, and we have publicly urged Wyoming and South Carolina to pass comprehensive legislation that will protect all individuals from any attack motivated by bias or prejudice. We also voiced our opposition to the legislation in Texas and elsewhere that has the potential to hinder voting access. We should make it easier for citizens to vote, not harder.

As part of our LGBTQ advocacy, we joined with Texas Competes and dozens of other Texas-based businesses to make it clear that we unequivocally support LGBTQ nondiscrimination laws. American opposes any efforts to exclude the LGBTQ community from full civil rights protections, and we continue to advocate for the passage of the Equality Act. This federal legislation would provide the same basic protections for LGBTQ people provided to other protected groups under federal law.

We also support passage of the CROWN Act, which would prohibit workplace discrimination based on hair texture and style. The CROWN Act is currently law in eight states. Until it is federally mandated, we are updating American's policies and acting to ensure that all our team members are protected.

## **Pandemic Support**

Concern for the health and economic well-being of team members is always top of mind at American. That includes our focus on helping them to access COVID-19 vaccinations, as well as our efforts to protect their livelihoods in the face of the pandemic's impact on our company and industry.

## **Making COVID-19 vaccinations convenient**

American has strongly encouraged our workforce to receive COVID-19 vaccinations. Many opted to do so through their local pharmacies or at other sites close to home.

For others, American teamed up with government agencies as well as airport and health care partners to launch a series of COVID-19 vaccination clinics. We facilitated events at eight of our hubs as well as our Tulsa and Pittsburgh maintenance facilities.

For example, Atrium Health hosted vaccination clinics at Charlotte Douglas International Airport (CLT) in March and April 2021, where team members and other CLT airport employees each received two doses of the Pfizer-BioNTech vaccine. Our vaccine clinic for team members at Chicago O'Hare International Airport in March 2021 also proved successful.

As an incentive, U.S. team members who got vaccinated also received an extra day of vacation and 5,000 Nonstop Thanks points — a \$50 value. For team members in other countries, where local regulations and employment laws vary, we took a different approach. American launched an appreciation program in August 2021 that provides international team members with 10,000 Nonstop Thanks points once they are fully vaccinated. Valued at \$100, these points can be used toward purchases in our online recognition catalog. The U.S.-based program concluded Oct. 1, 2021.

On the heels of these efforts, we began promoting the importance of COVID-19 vaccines to other groups beyond our own workforce. In July

2021, American also partnered with the White House COVID-19 task force, vaccine makers and trucking logistics specialists to ship close to 5 million doses on flights from Chicago to Guatemala City on donated, cargo-only flights.

# Working together to keep team members on the job

The COVID-19 pandemic and the resultant plummeting demand for air travel created unprecedented hardships for our team members. To help stabilize our industry and protect our workforce, American joined with union leaders and other airlines to request financial support from the federal government.

The U.S. Congress responded with the Payroll Support Program (PSP) of the CARES Act. This legislation allowed American to keep our frontline workforce in place through the COVID-19 crisis, providing us with significant financial support to be used exclusively for the continued payment of team member wages, salaries and benefits. The PSP's extension in December 2020 enabled American

to begin recalling the thousands of team members we had been forced to furlough just two months earlier due to a temporary lapse in the program. Thanks to the hard work of our administrative support teams in departments across the company, we were able to quickly deploy PSP funding and reinstate employee pay and benefits just in time for the holidays.

Thanks to the March 2021 passage of the American Rescue Plan, additional PSP funding was made available through Sept. 30, 2021. By that point, sufficient demand had returned for the company to restart hiring for all workgroups. We remain deeply grateful to the U.S. Congress and the many other policymakers in the federal government and around the country for understanding the significance and the urgency of this relief for our industry, our team members and our economy.



For detailed team member diversity data, see pages 30-31.





# **Serving Our Customers**

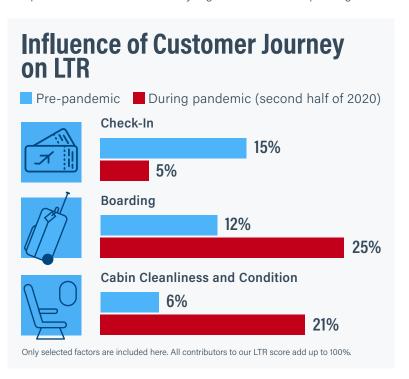
American Airlines is committed to providing our customers with outstanding service, and we constantly seek feedback to understand how we can improve and enhance their experience. The first and most important question we ask customers in surveys concerns their likelihood to recommend (LTR).

LTR measures a combination of satisfaction, loyalty and customer engagement on a scale of 0 to 10 based upon a recent trip. Factors such as positive check-in and boarding experiences as well as ontime performance drive LTR scores. During 2020, our LTR rose by 0.8 points based upon strong performance pre-pandemic and how we welcomed customers back to travel in the latter part of 2020. Additionally, as American and our entire industry grappled with COVID-19 in 2020, the impact of boarding and some other traditional LTR drivers only grew. Others, including food and beverage and flight attendant interaction, gave way in importance to drivers that were more closely related to pandemic safety.

Not surprisingly, customers became more concerned about aircraft cleanliness. By moving quickly to enhance our cleaning procedures and safety protocols at every step in the passenger journey, we addressed many such concerns.

## Strengthening how we measure LTR

Beginning in 2021, we made some important changes in how we measure LTR. Although LTR is a commonly used metric across industries, there is no industry standard methodology for measuring or reporting it. Most significantly, we shifted our sampling and reporting to reflect a representative mix of customers by segment relative to the passenger



mix of customers flying on a daily basis. This means ensuring a balance of feedback from AAdvantage members and non-members. We believe that these changes will make American more accountable to all our customers and help us better understand their collective priorities. In the long run, our business — and our customers — can only benefit.

American posted an LTR score of 71.5 from January through June 2021. In fact, we outpaced our LTR projections for the first five months of the year. However, LTR declined over the summer as we faced some operational challenges. For the full year, we have set a target of 72.7. If we adjust our score from prior years to reflect the broader customer mix we now sample, that target would represent our best LTR score since our merger with US Airways in 2013.

# Launching new initiatives to enhance customer satisfaction

American uses advanced analytical modeling to understand the most important parts of the journey to flyers. That has led to dozens of initiatives that have either already been launched or are scheduled to be implemented by the end of 2021. We have expanded our free in-flight entertainment options through exclusive partnerships with Rosetta Stone, one of the best known and most trusted brands for language learning, and Skillshare, the world's largest online learning community for creativity.

With our Five Star Essentials service, we have simplified the airport experience for passengers traveling with children or with anyone who needs extra help. That includes being greeted at Priority Check-in, getting help selecting seats and checking baggage, and being escorted through the airport right to the gate. This service is currently available at Charlotte Douglas International Airport, Dallas Fort Worth International Airport and Miami International Airport.

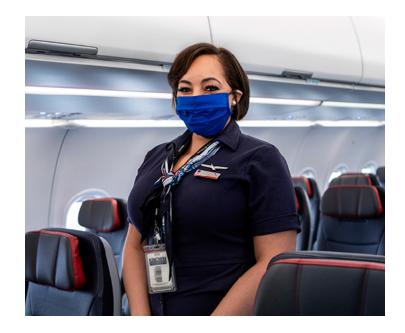
For operational performance data, see page 25.

We are constantly evaluating and enhancing the boarding experience to improve both operational efficiency and customer satisfaction with several initiatives on the horizon to support both objectives.

In our onboard food and beverage service, we are also once again offering full beverage service in domestic premium cabins and non-alcoholic beverage service in the main cabins on all flights of less than 2,200 miles. Both had been temporarily suspended at the start of the pandemic. We are considering a phased approach to returning to pre-COVID-19 levels of service over the coming months.

# Continuing our focus on operational performance during a challenging year

In addition to LTR, we track the following three operational metrics that impact our customers' experience: on-time performance, completion factor (i.e., percentage of flights arriving at their destinations without cancellations) and mishandled baggage. Our on-time performance and mishandled baggage rate improved during the pandemic, while our completion factor for 2020 was down from 2019.



# Easing travel for customers as the pandemic continues

The COVID-19 pandemic is likely to remain a factor in air travel for some time to come. With that in mind, American has continued to take appropriate precautions while looking for ways to streamline the experience for our passengers.

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For example, we now use the VeriFLY app to help customers understand and verify their travel requirements. Available for iOS and Android, this mobile health wallet makes it easy for passengers to upload negative COVID-19 test results, vaccination records and forms they need to get verified status for travel. Our customers can also use the app to get mobile boarding passes and take advantage of dedicated and expedited check-in lanes at several hubs. More than 1 million American customers have already successfully used VeriFLY for international travel.

American has also partnered with trusted COVID-19 testing providers to allow customers to take a test at a clinic, take a test at home before their trip or order a test kit to pack for their return trip. Among our clinic partners, both GoHealth and CareNow each offer more than 150 locations in the United States. For at-home testing, customers can order a kit from LetsGetChecked to take before their trip, with a 48-hour turnaround time for results. Qured, eMed and Optum all provide packable test kit options for return trips.

As a participant in Hawaii's Pre-Clear program, American is also helping passengers bound for that state to save time. Pre-Clear allows trained team members to verify COVID-19 vaccinations or tests and to provide approved wristbands that allow passengers to skip the lines upon arrival. We offer this program in several hubs and will continue to roll it out at additional airports.

# Task Force on Climate-related Financial Disclosures (TCFD) Index

	TCFD Recommended Disclosure	Disclosure Location
GOVERNANCE		
Disclose the organization's governance around climate-related risks and opportunities.	<ul> <li>Describe the board's oversight of climate-related risks and opportunities.</li> </ul>	<ul> <li>American Airlines 2019–20 ESG Report — Addressing Climate Change — Governance and Management (p. 28)</li> </ul>
	<ul> <li>Describe management's role in assessing and managing climate- related risks and opportunities.</li> </ul>	
STRATEGY		
Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy and financial	<ul> <li>Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.</li> </ul>	<ul> <li>American Airlines 2019–20 ESG Report — Addressing Climate Change (p. 8)</li> </ul>
planning where such information is material.	<ul> <li>Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.</li> </ul>	<ul> <li>American Airlines 2019–20 ESG Report — Addressing Climate Change — Our Strategy (p. 14)</li> </ul>
	<ul> <li>Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.</li> </ul>	<ul> <li>American Airlines 2019–20 ESG Report — Addressing Climate Change — Climate-Related Risks and Opportunities (p. 22)</li> </ul>
RISK MANAGEMENT		
Disclose how the organization identifies, assesses and manages climate-related risks.	<ul> <li>Describe the organization's processes for identifying and assessing climate-related risks.</li> </ul>	<ul> <li>American Airlines 2019–20 ESG Report — Addressing Climate Change — Identifying and Assessing Climate-Related Risks (p. 20)</li> </ul>
	<ul> <li>Describe the organization's processes for managing climate- related risks.</li> </ul>	
	<ul> <li>Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.</li> </ul>	
METRICS AND TARGETS		
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	<ul> <li>Disclose the metrics used by the organization to assess climate- related risks and opportunities in line with its strategy and risk management process.</li> </ul>	<ul> <li>Advancing Our Climate Change Strategy — American's Pathway to Net Zero in 2050 (p. 7)</li> <li>Advancing Our Climate Change Strategy — Our GHG Emissions in</li> </ul>
	<ul> <li>Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas emissions, and the related risks.</li> </ul>	2020 (p. 8)  Data Tables (p. 25)
	<ul> <li>Describe the targets used by the organization to manage climate- related risks and opportunities and performance against targets.</li> </ul>	- Data (doi:00 (pr.20)

# Sustainability Accounting Standards Board (SASB) Index — Airline Industry Standard

SASB Code	SASB Metric	Disclosure Location or Response
GREENHOUSE G	AS EMISSIONS	
TR-AL-110a.1	Gross global Scope 1 emissions	<ul> <li>Advancing Our Climate Change Strategy — Our GHG Emissions in 2020 (p. 8)</li> </ul>
		Data Tables (p. 26)
TR-AL-110a.2	Discussion of long-term and short-term strategy	<ul> <li>Advancing Our Climate Change Strategy (p. 6)</li> </ul>
	or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance	<ul> <li>Advancing Our Climate Change Strategy — American's Pathway to Net Zero in 2050 (p. 7)</li> </ul>
	against those targets	<ul> <li>Advancing Our Climate Change Strategy — Our GHG Emissions in 2020 (p. 8)</li> </ul>
		■ Data Tables (p. 26)
		American Airlines 2019–20 ESG Report — Addressing Climate Change (p. 8)
TR-AL-110a.3	<ul><li>(1) Total fuel consumed, (2) percentage alternative,</li><li>(3) percentage sustainable</li></ul>	■ Data Tables (p. 27)
LABOR PRACTIC	CES	
TR-AL-310a.1	Percentage of active workforce covered under collective bargaining agreements	<ul> <li>Supporting Our Team Members — Diversity, Equity and Inclusion (p. 19)</li> </ul>
TR-AL-310a.2	(1) Number of work stoppages and (2) total days idle	American Airlines did not have any union work stoppages or idle days in 2020.
COMPETITIVE B	EHAVIOR	
TR-AL-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations	In 2020, we had zero monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations.
ACCIDENT AND	SAFETY MANAGEMENT	
TR-AL-540a.1	Description of implementation and outcomes of a	<ul> <li>American Airlines 2019–20 ESG Report — Operating Safely — Safety Governance and Management (p. 31)</li> </ul>
	Safety Management System	Operating Safely (p. 16)
		■ Data Tables (p. 29)
TR-AL-540a.2	Number of aviation accidents	■ Data Tables (p. 29)
TR-AL-540a.3	Number of governmental enforcement actions of aviation safety regulations	■ Data Tables (p. 29)

## **Data Tables**

Financial Performance	2020	2019	2018
REVENUE			
Passenger	\$ 14,518	\$ 42,010	\$ 40,676
Cargo	769	863	1,013
Other	2,050	2,895	2,852
Total operating revenue	17,337	45,768	44,541
Total operating expenses	27,758	42,703	41,885
Operating income (loss)	(10,421)	3,065	2,656
Income tax provision (benefit)	(2,568)	570	472
Net income (loss)	(8,885)	1,686	1,412
Basic earnings (loss) per share	(18.36)	3.80	3.04
Cash dividends declared per common share	0.10	0.40	0.40

<sup>\*</sup> In millions of U.S. dollars, except per-share amounts.

Оре	erational Performance	2019	2018		
	MAINLINE				
	Revenue passenger miles (millions)*	77,065	212,859	205,451	
	Available seat miles (millions)**	119,567	248,833	248,562	
Metrics	Passenger load factor (percent)***	64.5	85.5	82.7	
	Departures (thousands)	619	1,115	1,098	
SASB	REGIONAL				
	Revenue passenger miles (millions)*	14,760	28,393	25,709	
	Available seat miles (millions)**	23,600	36,255	33,492	
	Passenger load factor (percent)***	62.5	78.3	76.8	

Note: American uses miles for our operational data reporting, rather than kilometers, as in the SASB metrics.

Operational Performance					
	2020	2019	2018		
On-time performance*	82.3%	77.7%	77.6%		
Completion factor**	93.9%	97.6%	97.4%		

Mishandled Baggage Rate (MBR)***					
2020 2019 2018					
By year	5.96	8.48	_		

<sup>\*</sup> Percentage of reported flight operations arriving less than 15 minutes after the scheduled arrival time.

<sup>\*</sup> Revenue passenger mile (RPM): A basic measure of sales volume. One RPM represents one passenger flown one mile.

<sup>\*</sup> Available seat mile (ASM): A basic measure of production. One ASM represents one seat flown one mile.

<sup>\*\*\*</sup> Passenger load factor: The percentage of available seats that are filled with revenue passengers.

<sup>\*\*</sup> Percentage of scheduled flight operations completed.

<sup>&</sup>quot;The U.S. Department of Transportation changed the way it measures mishandled baggage on domestic flights as of Jan. 1, 2019. The new MBR captures total lost, delayed or damaged baggage reports, divided by 1,000 checked bags; the previous rate was calculated per 1,000 passengers. We cannot recalculate prior years using the new methodology and thus are reporting 2019 and 2020 data only, which is combined for mainline and regional domestic flights.

Env	ironmental Performance	2020	2019	2018
DIR	ECT AND INDIRECT GHG EMISSIONS	6		
Sco	pe 1 emissions (thousands of metric tons	of CO <sub>2</sub> e)		
	Scope 1 emissions — all sources*	19,831	41,143	40,276
	– Jet fuel emissions**	19,636		
γ	<ul> <li>Emissions associated with Sustain- able Aviation Fuel (CH<sub>4</sub> and N<sub>2</sub>O)</li> </ul>	0.02		
letric	- Diesel emissions	31		
SASB Metrics	- Gasoline emissions	50		
SA	- LP gas emissions	0.2		
	- Heating oil emissions	6		
	- Natural gas emissions	75		
	– Purchased CO₂e	33		
Bio	genic emissions (thousands of metric ton	s of CO <sub>2</sub> e)		
	ssions associated with Sustainable ation Fuel emissions (CO <sub>2</sub> )	3.6	_	_
Sco	pe 2 emissions (thousands of metric tons	of CO <sub>2</sub> e)		
Sco	pe 2 location-based emissions	258	296	328
Sco	pe 2 market-based emissions***	250	274	_
Sco	pe 3 emissions (thousands of metric tons	of CO <sub>2</sub> e)		
Sco	pe 3 emissions — all categories****	9,674	15,968	15,541
- C	ategory 1 (purchased goods and services)	1,905	2,640	
- Category 2 (capital goods)		289	271	
	ategory 3 (fuel and energy-related ctivities)	6,802	12,348	
	ategory 5 (waste generated in perations)	2	2	

<b>Environmental Performance</b>	2020	2019	2018
DIRECT AND INDIRECT GHG EMISSION	S (CONTINUED)		
Scope 3 emissions (thousands of metric ton	s of CO <sub>2</sub> e) (continu	ed)	
- Category 6 (business travel)	58	122	
- Category 7 (employee commuting)	223	227	
- Category 8 (upstream leased assets)	52	3	
- Category 9 (downstream transport)	11	23	
- Category 15 (investments)	332	332	
OTHER EMISSIONS			
Aircraft Emissions (metric tons from landing	/take-off cycle)		
Nitrous oxide (NOx)	12,061	19,883	19,254
Hydro carbons (HC)	514	1,099	1,087
Carbon monoxide (CO)	7,474	11,534	11,146
<b>Ground Emissions From Reporting Facilities</b>	(metric tons)		
Carbon monoxide (CO)	63.0	40.7	39.5
Nitrous oxide (NOx)	85.7	64.5	58.9
Sulfur oxide (SOx)	1.0	1.9	1.5
Volatile organic compounds (VOC)	81.8	91.7	91.3
Particulate matter (PM)	6.8	6.7	11.5
Other Emissions (metric tons)			,
Ozone-depleting substances	0.4	1.2	14.5

Note: In 2020, disaggregated categories are provided for Scope 1 and Scope 3 emissions, however emissions were not disaggregated for most prior years.

<sup>\*</sup> In 2020, Scope 1 emission factors transitioned from The Climate Registry to the GHG Protocol and EPA Emissions Factor Hub. Prior years were not restated.

<sup>&</sup>quot; Jet fuel emissions represents emissions from mainline operations and owned regional airlines Envoy, PSA and Piedmont.

<sup>\*\*\* 2020</sup> amount corrected from what appeared in the original version of this report, released in October 2021.

<sup>\*\*\*\*</sup> In 2020, Scope 3 emission factors transitioned from the WRI Scope 3 Tool to the EPA's Supply Chain GHG Emissions Factors for US Industries.

Prior years were not restated.

Env	ironmental Performance	2020	2019	2018		
	FUEL USE					
	Non-Renewable Fuel Use (millions of gallons)					
	Jet fuel*	2,070	4,157	4,072		
	Diesel	2.96	4.21	4.06		
	Gasoline	5.60	7.49	6.89		
	LP gas	0.03	0.04	0.05		
	Heating oil	0.08	0.02	0.18		
	Natural gas (million MMBtu)	0.14	0.16	0.15		
	Renewable Fuel Use (millions of gallons)					
	Jet fuel sourced from sustainable feedstock	0.381	_	_		
trics	STANDARDIZED ENERGY CONSUMPTION					
SASB Metrics	Non-Renewable Energy Consumption (MWhs)					
SAS	Jet fuel — nonrenewable	74,351,252	151,612,544	148,485,642		
	Other fuels — nonrenewable	750,221	939,758	864,549		
	Total fuel — nonrenewable fuels	75,101,473	152,552,302	149,350,191		
	Electricity consumption — nonrenewable direct	530,202	626,526	674,513		
	Total energy consumption — nonrenewable	75,631,675	153,178,828	150,024,704		
	Renewable Energy Consumption (MWhs)					
	Jet fuel sourced from sustainable feedstock	13,598	_	_		
	Direct purchase of renewable electricity**	53,351	51,557	28,136		
	Direct + indirect purchase of renewable electricity***	180,463	227,373	154,046		

Env	Environmental Performance 2020 2019 2018					
	STANDARDIZED ENERGY CONSUMPTION (CONTINUED)					
	Renewable energy consumption	194,061	227,373	154,046		
	Total Energy Consumption (MWhs)	_	_			
	Jet fuel	74,364,850	151,612,544	148,485,642		
	Other fuels	750,221	939,758	864,549		
	Total fuels	75,115,071	152,552,302	149,350,191		
	Electricity	583,553	678,083	702,649		
Metrics	Total energy	75,698,624	153,230,385	150,052,840		
Met	Renewable Energy as a Percentage of Total Energy					
SASB	Renewable jet fuel as a percentage of total jet fuel	0.018%	_	_		
	Renewable direct electricity as a percentage of total electricity	9.14%	7.60%	4.00%		
	Renewable direct + indirect electricity as a percentage of total electricity	30.9%	33.53%	21.92%		
	Renewable direct energy as a percentage of total energy	0.09%	0.03%	0.02%		
	Renewable direct + indirect energy as a percentage of total energy	0.26%	0.15%	0.10%		

<sup>\*</sup> Jet fuel consumption represents jet fuel from mainline operations and owned regional airlines Envoy, PSA and Piedmont.

<sup>&</sup>quot; Amounts from 2016 to 2018 were restated to reflect the year in which renewable energy certificates were retired rather than when electricity was purchased.

<sup>&</sup>quot;Indirect purchases represent electricity purchased for American's facilities indirectly through airport authorities.

Environmental Performance	2020	2019	2018	
PROGRESS TOWARD GOALS				
Renewable Energy Goal				
Jet fuel sourced from sustainable feedstock (million gigajoules)	0.05	_		
Direct purchase of renewable electricity (million gigajoules)	0.19	0.19		
Cumulative renewable energy used since 2019	0.43	0.19		
% of goal achieved to use 2.5 million gigajoules by 2025	17.2%	7.6%		
<b>Emissions Intensity Goal</b>				
Intensity improvement since baseline year of 2014	20.2%	-5.3%	-5.2%	
INTENSITY PERFORMANCE				
Fuel and NOx Intensity				
Passenger fuel intensity (Liters/100 Passenger Kilometer)	5.424			
Cargo fuel intensity (Liters/Tonne Kilometer)	0.949			
Passenger NOx intensity (g of NOx/ Passenger Kilometer)	0.075			
Cargo NOx intensity (g of NOx/Tonne Kilometer)	0.829			
GHG Emissions Intensity				
Scope 1 Jet Fuel Emissions per 1,000 Revenue Ton Miles	1.98	1.56	1.53	
Sales intensity (g CO <sub>2</sub> e from jet fuel per dollar of revenue)	1,133	862	868	
SBTi Aviation Tool carbon intensity (life cycle g CO <sub>2</sub> e/RTK)	1,888	1,228		

Environmental Performance	2020	2019	2018		
WASTE					
Hazardous waste (tons)	715	901	783		
WATER					
Water use for American's major facilities, excluding airports (millions of gallons)*	466	495	457		
NOISE					
Percent of aircraft certified as, or meeting, Chapter 3 noise limits	100%	100%	100%		
Percent of aircraft certified as, or meeting, Chapter 4 noise limits	100%	100%	98%		
Percent of aircraft certified as, or meeting, Chapter 5 noise limits	19%	22%	22%		
ENVIRONMENTAL COMPLIANCE					
Number of environmental notices of violation	3	5	9		
Amount of environmental fines and penalties (thousands of U.S. dollars)	\$1.5	\$6.5	\$4.8		
Spills recorded (1 gallon or greater)	162	429	418		

<sup>\*</sup> From municipal water supplies.

Community Impact	2020	2019	2018			
GLOBAL GIVING						
Total global giving — all sources (millions of U.S. dollars)	\$22.5	\$33.0	\$35.0			
- Cash donations (millions of U.S. dollars)	\$6.0					
<ul> <li>Total product or services donations, projects/ partnerships or similar (millions of U.S. dollars)</li> </ul>	\$16.5					
VOLUNTEER SUPPORT						
Total volunteer hours (thousand hours)	134	157	186			

Flight Safety Performance		2020		019
	Mainline	Regional	Mainline	Regional
Number of flights*	1.1	1.1 million		nillion
Number of aviation accidents**	2	3	4	3
Number of enforcement actions from government agencies***	0	0	0	0
Number of safety risks and hazardous situations identified <sup>†</sup>	104	502	81	372
Percentage of safety risks and hazardous situations identified that were mitigated <sup>‡</sup>	95%	99%	97%	97%
Aircraft ground damages (rate per 10,000 departures) <sup>§</sup>	2.16	0.81	1.61	0.72
wiation Safety Action Program reports	7,131	5,667	11,952	10,349

<sup>\*</sup> Mainline and owned regional.

<sup>§</sup> Due to the slowdown in travel across the industry in 2020, American implemented an expansive temporary aircraft storage program throughout the network that resulted in a significant increase of aircraft on the ground, where damages are most likely to occur.

Team Member Safety Performance	2020		2019		2018	
	Mainline	Regional	Mainline	Regional	Mainline	Regional
Injury rate*	5.64	3.82	9.57	7.11	9.21	7.55
Lost day rate**	3.66	2.33	6.14	3.74	5.43	3.88
Work-related fatalities	0	1	0	1	0	0

<sup>\*</sup> Total recordable cases per 200,000 hours worked.

<sup>&</sup>quot; Defined according to the International Civil Aviation Organization (Annex 13) and the National Transportation Safety Board (Part 830). Both mainline accidents in 2020 involved aircraft damage, one from a de-icing truck operating near the wing and a second involving a tail strike upon landing; no crewmember or customer was injured in these accidents. The three regional accidents in 2020 involved crew member and passenger injuries, due in two cases to turbulence and in the third case to a runway excursion that occurred when the aircraft brakes locked upon landing.

<sup>&</sup>quot;Defined to include enforcement actions by the FAA, the European Aviation Safety Agency or equivalent national authorities related to the regulation of aviation safety.

<sup>&</sup>lt;sup>†</sup> The majority of our risk assessments are performed proactively prior to implementing or revising systems/procedures. American's comprehensive SMS covers safety risks and hazardous situations related to six areas: flight safety, flight service, ground operations, technical operations (maintenance), security and environmental. The figures reported here include all such risks identified by our SMS. The number of risk assessments increased in 2020 due to operational and staffing changes as a result of COVID-19; e.g., returning to service aircraft that had been stored required risk assessments to determine readiness to fly.

<sup>†</sup> Our SMS requires that we mitigate identified risks, particularly high risks, to as low as reasonably practicable (ALARP). These systemic and residual risks are monitored, measured and tracked.

<sup>&</sup>quot;The lost day rate, which the U.S. Occupational Safety and Health Administration calls the Days Away from Work Injury and Illness rate, is calculated as the number of cases multiplied by 200,000 work hours divided by total hours worked.

Gender Diversity		2020		2019		
	Total	Female	Male	Total	Female	Male
Permanent employees	130,529	40%	60%	145,070	41%	59%
EMPLOYMENT TYPE						
Full-time	110,795	39%	61%	123,756	39%	61%
Part-time	19,734	48%	52%	21,314	50%	50%
EMPLOYEES BY REGION						
United States	125,811	40%	60%	138,792	40%	60%
Canada	179	48%	52%	431	48%	52%
Mexico, Caribbean, Latin America	3,555	59%	41%	4,221	60%	40%
Europe and Asia	984	51%	49%	1,626	56%	44%
EMPLOYEE CATEGORY						
Director and above	559	32%	68%	569	33%	67%
Management and professional	14,844	43%	57%	16,136	43%	57%
Administrative	2,867	72%	28%	3,803	71%	29%
Passenger service	19,432	61%	39%	22,219	62%	38%
Reservations	4,090	82%	18%	4,385	83%	17%
Maintenance and related	18,188	7%	93%	18,847	6%	94%
Fleet service	20,327	15%	85%	22,385	16%	84%
Pilots	17,915	5%	95%	19,957	5%	95%
Flight attendants	27,589	75%	25%	30,491	76%	24%
International	4,718	57%	43%	6,278	58%	42%
BOARD OF DIRECTORS						
Board of Directors	11	18%	82%	10	20%	80%

Ethnic Composition of U.S. Employees and Board of Directors		2020			2019			
Employee Category	Self-Identified Minority	Self-Identified Nonminority	Not Reported/ Identified	Self-Identified Minority	Self-Identified Nonminority	Not Reported/ Identified		
Director and above	22.5%	75.1%	2.3%	21.6%	76.4%	1.9%		
Management and professional	42.4%	55.4%	2.1%	42.1%	55.8%	2.2%		
Administrative	49.6%	45.9%	4.5%	50.8%	41.2%	8.0%		
Passenger service	61.9%	33.6%	3.6%	58.3%	32.4%	9.3%		
Reservations	56.9%	41.6%	1.5%	55.5%	43.4%	1.2%		
Maintenance and related	33.2%	64.4%	2.4%	31.0%	65.9%	3.1%		
Fleet service	63.2%	31.4%	5.4%	60.8%	31.9%	7.3%		
Pilots	11.6%	82.3%	6.0%	10.6%	82.6%	6.7%		
Flight attendants	34.1%	62.2%	3.8%	33.1%	62.9%	4.0%		
BOARD OF DIRECTORS								
Board of Directors	18.0%	82.0%	0.0%	20.0%	80.0%	0.0%		

<sup>\*</sup> Diversity data are for U.S. workforce only since diversity tracking is prohibited by law in some other countries.

	thnic Composition f U.S. Employees	African American	Asian	American Indian/ Alaskan Native	Hispanic/Latino	Native Hawaiian/ Other Pacific Islander	Two or More Races	White	Not Specified
	<b>Employee Category</b>								
	Total	21,152	7,339	883	19,812	991	2,383	68,164	5,087
2020	Male	52%	58%	65%	63%	50%	52%	63%	64%
•	Female	48%	42%	35%	37%	50%	48%	37%	36%
	Total	23,087	7,767	977	20,126	1,088	2,857	75,340	7,550
2019	Male	51%	58%	65%	62%	53%	50%	62%	62%
	Female	49%	42%	35%	38%	47%	50%	38%	38%

<sup>\*</sup> Diversity data are for U.S. workforce only since diversity tracking is prohibited by law in some other countries.



The SCS Greenhouse Gas Footprint Verification Program has conducted a verification of GHG emissions based upon the following objectives, criteria, and scope:

### **Verification Objectives**

- Evaluate the organization's GHG inventory based per the level of assurance and materiality specified, including assessment of any significant changes and the organization's GHG-related controls
- Evaluate conformance with specified verification criteria

#### **Verification Criteria**

- World Resources Institute/World Business Council for Sustainable Development's "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)" dated March 2004
- World Resources Institute/World Business Council for Sustainable Development's "Scope 2 Guidance Document: An Amendment to the GHG Protocol Corporate Standard" dated 2015
- World Resources Institute/World Business Council for Sustainable Development's "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" dated 2011
- The Investor CDP Information Request
- ISO 14064-3: 2006 Specification with guidance for the validation and verification of GHG assertions

#### **Verification Scope**

- Company: American Airlines Group Inc.
- Emissions Year: 2020 (Jan 1, 2020 Dec 31, 2020)
- Geographic Boundary: Worldwide operations under operational control
- Level of Assurance: Limited
- Materiality: +/-5% quantitative threshold for direct and indirect emissions, qualitative based upon requirements specified within referenced criteria

#### **Verification Opinion**

This Verification Statement documents that SCS Global Services has conducted verification activities in compliance with ISO 14064-3: Specification with guidance for the validation and verification of greenhouse gas assertions. Based upon the reporting scope, criteria, objectives, and agreed upon level of assurance, SCS has issued the following verification opinion:

Positive Verification – No evidence was found that the inventory was not prepared in all material respects with the reporting criteria (Limited)

### **Verified Emissions**

E	EMISSIONS SUMMARY - tonnes CO2e									
SCOPE	CO <sub>2</sub>	CH₄	N <sub>2</sub> O	HFCs						
SCOPE 1	19,676,540.31	76,892.73	44,213.03	32,959.33						
SCOPE 2 - LOCATION	256,832.16	408.24	510.16	1						
SCOPE 2 - MARKET	249,287.82	408.20	510.13	•						
SCOPE 3 - CATEGORY 3	6,802,712.34	<reported as="" only<="" tco2e="" td=""><td></td></reported>								
BIOGENIC	3,592.66	•	-	-						

Signature: Tavio Benetti
Lead Verifier: Tavio Benetti

**CARBON** 

**FOOTPRINT** 

Lead Verifier: Tavio Benetti
Date: October 4, 2021

Signature:

Independent Reviewer:Nicole MuñozDate:October 15, 2021

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# Learn more about how American Airlines manages ESG issues at www.aa.com/ESG

#### Cautionary Statement Regarding Forward-Looking Statements

Certain of the statements contained in this report should be considered forward-looking statements within the meaning of the Securities Act, the Exchange Act, and the Private Securities Litigation Reform Act of 1995. These forward-looking statements may be identified by words such as "may," "will," "expect," "intend," "anticipate," "believe," "estimate," "plan," "project," "could," "should," "would," "continue," "seek," "target," "guidance," "outlook," "if current trends continue," "optimistic," "forecast" and other similar words. Such statements include, but are not limited to, statements about the Company's plans, objectives, expectations, intentions, estimates and strategies for the future, and other statements that are not historical facts. These forward-looking statements are based on the Company's current objectives, beliefs and expectations, and they are subject to significant risks and uncertainties that may cause actual results and financial position and timing of certain events to differ materially from the information in the forward-looking statements. These risks and uncertainties include, but are not limited to, those set forth in the Company's Quarterly Report on Form 10-Q for the quarter ended Sept. 30, 2021, (especially in Part I, Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations and Part II, Item 1A. Risk Factors), and other risks and uncertainties listed from time to time in the Company's other filings with the Securities and Exchange Commission. There may be other factors of which the Company is not currently aware that may affect matters discussed in the forward-looking statements and may also cause actual results to differ materially from those discussed. In particular, the consequences of the coronavirus outbreak to economic conditions and the travel industry in general and the financial position and operating results of the Company in particular have been material, are changing rapidly, and cannot be predicted.

The Company does not assume any o